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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,149	11/28/2001	Shawn R. Gettemy	035451-0175 (3721.Palm)	3054

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EXAMINER

NGUYEN, CHANH DUY

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/996,149	<b>Applicant(s)</b> GETTEMY ET AL.	
	<b>Examiner</b> Chanh Nguyen	<b>Art Unit</b> 2675	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. The amendment filed on August 03, 2004 has been entered and considered by examiner.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 18, 20-21 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Failla (U.S. Patent No. 5,128,662) in view of Katsura (U.S. Patent No. 6,377,324)

As to claim 18, Failla (Fig 16) discloses a handheld computer including a housing (207), an expandable display assembly (210) supported on the housing (230), providing a viewing area when the expandable display assembly is folded (i.e. display segment 214 is folded as shown by curved directional arrow in Fig.16, the display segment 217 still provides viewing area because display segment 214 is only half size of display segment 217). Failla teaches the expandable display assembly (210) providing a larger viewing area when expandable display assembly is unfolded (i.e. display segment 214 is unfolded as shown in Figure 16). Failla teaches a user may view images on the viewing images on the viewing area when the display assembly is folded and when the display is unfolded (i.e. when the display segment 214 is folded, a user is still able to view the image on display segments 217 and 213). The only thing different between the claimed invention and the reference of Failla is that Failla does not mention a touch sensor associated with the expanded display. In same field of endeavor, Katsura teaches that the touch sensitive input operating part is integral part of the flexible liquid crystal display panel (4) (see column 5, lines 43-48). The touch sensitive input operating part of Katsura clearly has a touch sensor which is known in the art of touch screen panel. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used a touch sensor of Katsura to the display screen of Failla so that a switching member for data entry need not be provided outside the display screen, thereby the screen can be made larger (see column 5, lines 43-49 of Katsura).

As to claim 24, this claim differs from claim 18 in that claim 24 is method whereas claim 18 is apparatus. Thus method claim 24 is analyzed with respect to apparatus claim 18. The limitation "flexible display" recited in claim 24 is taught by Katsura (i.e a flexible liquid crystal display panel 4; see column 4, line 11.

As to claims 20-21, both Failla and Katsura clearly teaches the expandable display (110) being foldable and a handheld computer.

As to claim 25, since the flexible display (4) of Katsura mounted to the handheld computer (1 and 2) (see column 5, lines 11-13), it is clear that the flexible display (4) can be decoupled from the handheld computer (1-2) as broad claimed language.

As to claims 26 and 27, Katsura teaches the flexible display (4) having a touch sensitive input operating part through which data can be entered by touching (see column 5, lines 12-20). Thus, it would have been obvious that the touch by a user can be performed by a fingertip or stylus.

5. Claims 1, 3-4, 7, 9-10, 13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bodony et al (U.S. Patent No. 6,307,751) in view of Gamsaragan et al (U.S. 2002/0140,690 A1) and Failla.

As to claim 1, Bodony discloses a display system (100), detachable from a host device (713) (see Figure 7 and Figure 19A) including a power source (712), a processor (702) coupled to the power source (712), a memory (708) coupled to the power source (712) and the processor (702). Bodony teaches a flexible electronic display (706) coupled to the processor (702) and the power source (712), a coupler (714) for coupling

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the flexible electronic display (706) to the host device (713). Bodony teaches a flexible touch screen sensor (touch screen; see column 7, lines 63-66) movable with the flexible electronic display (see column 12, lines 54-64 and column 13, lines 16-25). Bodony teaches a transceiver (714) coupled to the processor (702).

Bodony does not mention "the transceiver receives information from the host device when the display is decoupled from coupler, and images are provided on the display based on the information". However, using wireless transceiver to communicate between two devices is well-known in the art. For example, in same field of endeavor with Bodony, Gamsaragan teaches using a radio link established between transceiver (22) on the base station (12) and transceiver (24) on the computing display subsystem (14) (see sections 0016 and 0021). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used transceiver as taught by Gamsaragan to the display system of Bodony so that the data information can be transferred from base station or host to the portable computer when a user is traveling from his/her regular workplace without sacrificing substantial computing power ( see sections 0004-0006 of Gamsaragan).

Both Bodony and Gamsaragan do not teach the flexible display being configured in more than two sections, each section being foldable back on another section. Failla (Figure 25) teaches a display assembly (310) being configured in more than two sections (display segments 312, 314 and 316), each section (e.g., 312) being foldable back on another section (e.g., 314), such that whatever sections (e.g., 314, 316) are view of the user including the display area being used by the host device (330)..

Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used a foldable display as taught by Failla to the flexible display of Bodony as modified by Gamsaragan so as to enhanced amount of information display capability while still being readily storable for transportability (see column 2, lines 38-45 of Failla).

As to claim 13, this claim differs from claim 1 only in that the term "flexible display" recited in claim 1 is replaced by the term "foldable display" in claim 13. Failla (Figure 25) clearly teaches the display assembly (310) being foldable as recited in the claim.

As to claim 7, this claim is broader than claim 13 since it does not recite the limitation "transceiver" as claim 13. Adding the limitation "the flexible display system assembly having a first viewing area that are viewable by a user...., at least when decoupled from coupler" is clearly taught by Failla.

As to claims 3 and 9-10, Failla clearly teaches the flexible display being foldable ; see column 14,lines 60-62. Failla teaches the flexible display can be scrolled into a roller. Thus the flexible display of Failla clearly can be folded because it has function of very flexibility screen such as rolling. If it can be rolled , then why it cannot be folded.

As to claim 4, Bodony clearly teaches the host device being a handheld device (see column 9, lines 18-28).

As to claim 15, Bodony clearly teaches a coupler (714) coupled to a handheld computer (713).

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6. Claims 2, 5, 8, 11, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodony in view of Gamsaragan and Failla, as applied to claims 1, 7 and 13, and further in view of Comiskey et al (U.S. Application Publication 2003/0067427).

As to claims 2, 8 and 14, note the discussion of Bodony, Gamsaragan and Failla above, Bodony, Gamsaragan and Failla do not mention the flexible electronic display being an electronic paper. Comiskey teaches that "the flexible display can be used as an electronic paper" (see page 8, paragraph 0095). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the electronic paper as taught by Comiskey to the display panel of Bodony as modified by Gamsaragan and Failla because the electronic paper can be used anywhere paper is used today but offers the ability to be updated via stylus (see page 8, paragraph 0095 of Comiskey).

As to claims 5, 11 and 16, Comiskey clearly teaches touch sensor including a transparent coating (see page 4, paragraph 0060).

7. Claims 6, 12, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodony in view Gamsaragan and Failla, as applied to claims 1, 7 and 13, and further in view of Charlier et al (U.S. Application Publication 2003/0064751).

As to claims 6, 12, 17, note the discussion of Bodony and Gamsaragan above, Bodony and Gamsaragan donot mention an electrotexile. Charlier teaches the use of well-known electrotexile material into the user interface (such as touch pad, key pad);



see page 2, paragraph 0029. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used electrotexile material as taught by Charlier to the touch pad of Bodony as modified by Gamsaragan because the electrotexile sensor can be folded without damage of the sensor.

8. Claims 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Failla in view of Katsura, as applied to claim 18, and further in view of Comiskey.

As to claim 19, note the discussion of above Failla and Katsura, Failla and Katsura do not mention the flexible electronic display being an electronic paper. Comiskey teaches that "the flexible display can be used as an electronic paper" (see page 8, paragraph 0095). Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used the electronic paper as taught by Comiskey to the display panel of Failla as modified by Katsura because the electronic paper can be used anywhere paper is used today but offers the ability to be updated via stylus (see page 8, paragraph 0095 of Comiskey).

As to claim 22, Comiskey clearly teaches touch sensor including a transparent coating (see page 4, paragraph 0060).

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over in view Failla in view of Katsura

As to claim 23, note the discussion of Failla and Katsura above, Failla and Katsura do not mention an electrotexile. Charlier teaches the use of well-known

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electrotextile material into the user interface (such as touch pad, key pad); see page 2, paragraph 0029. Therefore, it would have been obvious to one of ordinary skill in the art at the invention was made to have used electrotextile material as taught by Charlier to the touch pad of Failla as modified by Katsura because the electrotextile sensor can be folded without damage of the sensor.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendment, the reference of Failla has been added for new ground of rejection.

### **Inquiries**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306**

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Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor (Receptionist)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

*cm*

C. Nguyen  
November 13, 2004

*Chanh Nguyen*  
CHANH NGUYEN  
PRIMARY EXAMINER